

IFWO

RAW SEQUENCE LISTINGPATE: 08/31/2004

PATENT APPLICATION: **US/10/798,773**TIME: 13:01:02

```
1 <110> APPLICANT: Yu, Xuanchuan
                Xie, Qiongshu
 3
                Abuin, Alejandro
                Walke, D. Wade
  4
  5 <120> TITLE OF INVENTION: Novel Human Kinases and Polynucleotides Encoding the Same
  6 <130> FILE REFERENCE: LEX-0344-USA
  7 <140> CURRENT APPLICATION NUMBER: US/10/798,773
 8 <141> CURRENT FILING DATE: 2004-03-11
 9 <150> PRIOR APPLICATION NUMBER: US/10/141,634
                                                                                                10 <151> PRIOR FILING DATE: 2002-05-08
11 <150> PRIOR APPLICATION NUMBER: US 60/289,727
12 <151> PRIOR FILING DATE: 2001-05-09
                                                                                                           ENTERED
13 <160> NUMBER OF SEQ ID NOS: 4
14 <170> SOFTWARE: FastSEO for Windows Version 4.0
16 <210> SEO ID NO: 1
                                                                                                   The second of a second of the 
17 <211> LENGTH: 1440
18 <212> TYPE: DNA
19 <213> ORGANISM: homo sapiens
20 <400> SEQUENCE: 1
                atggacgcca ctatcgcccc gcaccgtatc ccccccgaga tgccccagta cggggaggag 60
21
                aaccacatct tegagttgat geagaacatg etggageaac teetgateea eeageeegaa 120
22
                gateceatee cetteatgat ecageacttg catagagaea acgaeaatgt geecaggatt 180
23
24
                gtaatattag gtccacccgc ctcagggaaa acaacaatag caatgtggct ctgcaaacat 240
25
                ctqaacaqca gtctcctcac cctggagaac ctgatcttaa atgagttttc ctatacggcc 300
26
                accgaageca gaaggettta tetgeaaagg aagacagtte ceagegeget getegteeag 360
                ctgattcagg aacgcctggc tgaagaggat tgcatcaagc agggctggat tctggatggc 420
27
                atccctgaga cgcgtgagca ggctctgagg atccagaccc tggggatcac acccagacac 480
28
                gtcattgtgc tgagtgctcc agacacggtc ctgatcgaga gaaacttggg gaagagaatc 540
29
30
                gacceteaaa etggagagat ttateacace acetttgaet ggeeaceega atetgaaate 600
                cagaaccgtc tcatggtgcc agaggacatc tcagagctgg agacggctca gaaactgctg 660
31
                gagtatcata ggaacatcgt cagggtcatt ccctcctacc ccaaaatcct caaagtcatc 720
32
                agtgctgacc agccatgtgt ggacgtcttc taccaggctc tgacctatgt ccaaagcaac 780
33
                categtacta atgeccegtt caceegagg gtgetgetge tegggeetgt gggeagtggg 840
34
                aaaagtctgc aggccgccct cctggcccag aaatacaggc ttgtcaatgt ctgctgtggg 900
35
                caactgctga aagaggctgt ggcagatagg accacgtttg gcgagctcat ccagcccttc 960
36
                tttgaaaagg agatggcagt tcctgacagc ctcctcatga aggtgctgag ccagcgcctg 1020
37
                gaccagcagg actgcatcca gaaaggctgg gtgctacacg gcgtcccgcg ggacctcgac 1080
38
                caggcacacc tgctgaaccg cctgggctac aatcccaaca gggtgttttt cctgaatgtg 1140
39
                ccatttgatt ccatcatgga gcggctgact ctgagaagaa ttgatccagt cactggggaa 1200
40
                aggtaccacc tcatgtacaa gccacctccc accatggaga tccaggctcg cctcctgcag 1260
41
                aacccaaaqq atqctgaaga gcaggtcaag ctgaaaatgg acctgttcta caggaactca 1320
42
                gctgacttgg agcagttgta tgggtcggcc atcaccctca atggggacca ggacccatac 1380
43
                acaqtetteq aatacateqa qagtgggate attaateeee tgeecaagaa aateeeetga 1440
44
```

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/798,773**DATE: 08/31/2004

TIME: 13:01:02

```
46 <210> SEQ ID NO: 2
47 <211> LENGTH: 479
48 <212> TYPE: PRT
49 <213> ORGANISM: homo sapiens
50 <400> SEQUENCE: 2
         Met Asp Ala Thr Ile Ala Pro His Arg Ile Pro Pro Glu Met Pro Gln
52
53
         Tyr Gly Glu Glu Asn His Ile Phe Glu Leu Met Gln Asn Met Leu Glu
54
                     20
                                          25
55
         Gln Leu Leu Ile His Gln Pro Glu Asp Pro Ile Pro Phe Met Ile Gln
56
57
         His Leu His Arg Asp Asn Asp Asn Val Pro Arg Ile Val Ile Leu Gly
58
59
         Pro Pro Ala Ser Gly Lys Thr Thr Ile Ala Met Trp Leu Cys Lys His
60
                              70
                                                   75
         Leu Asn Ser Ser Leu Leu Thr Leu Glu Asn Leu Ile Leu Asn Glu Phe
61
62
         Ser Tyr Thr Ala Thr Glu Ala Arg Arg Leu Tyr Leu Gln Arg Lys Thr
63
64
                                          105
         Val Pro Ser Ala Leu Leu Val Gln Leu Ile Gln Glu Arg Leu Ala Glu
65
66
                                      120
67
         Glu Asp Cys Ile Lys Gln Gly Trp Ile Leu Asp Gly Ile Pro Glu Thr
68
                                  135
                                                       140
         Arg Glu Gln Ala Leu Arg Ile Gln Thr Leu Gly Ile Thr Pro Arg His
69
70
                             150
                                                  155
71
         Val Ile Val Leu Ser Ala Pro Asp Thr Val Leu Ile Glu Arg Asn Leu
72
                                              170
73
         Gly Lys Arg Ile Asp Pro Gln Thr Gly Glu Ile Tyr His Thr Thr Phe
74
                                          185
75
         Asp Trp Pro Pro Glu Ser Glu Ile Gln Asn Arg Leu Met Val Pro Glu
76
                                      200
77
         Asp Ile Ser Glu Leu Glu Thr Ala Gln Lys Leu Leu Glu Tyr His Arg
78
                                  215
79
         Asn Ile Val Arg Val Ile Pro Ser Tyr Pro Lys Ile Leu Lys Val Ile
80
                             230
         Ser Ala Asp Gln Pro Cys Val Asp Val Phe Tyr Gln Ala Leu Thr Tyr
81
82
                         245
                                              250
83
         Val Gln Ser Asn His Arg Thr Asn Ala Pro Phe Thr Pro Arg Val Leu
84
                                          265
85
         Leu Leu Gly Pro Val Gly Ser Gly Lys Ser Leu Gln Ala Ala Leu Leu
86
                                      280
                                                           285
         Ala Gln Lys Tyr Arg Leu Val Asn Val Cys Cys Gly Gln Leu Leu Lys
87
88
                                  295
89
         Glu Ala Val Ala Asp Arg Thr Thr Phe Gly Glu Leu Ile Gln Pro Phe
90
                              310
                                                  315
         Phe Glu Lys Glu Met Ala Val Pro Asp Ser Leu Leu Met Lys Val Leu
91
92
93
         Ser Gln Arg Leu Asp Gln Gln Asp Cys Ile Gln Lys Gly Trp Val Leu
94
                                          345
```

RAW SEQUENCE LISTING DATE: 08/31/2004 PATENT APPLICATION: US/10/798,773 TIME: 13:01:02

96	Hi	s G	_	Val 1 355	Pro .	Arg	Asp	Leu	Asp 360	Gln	Ala	His	Leu	Leu 365	Asn	Arg	Leu	
97	Gl	уΊ			Pro .	Asn	Arg	Val		Phe	Leu	Asn	Val		Phe	Asp	Ser	
98		3	370					375					380					
99	Il	e M	1et	Glu <i>I</i>	Arg	Leu	Thr	Leu	Arg	Arg	Ile	Asp	Pro	Val	Thr	Gly	Glu	
100	3	85					390)				395	5				400	
101	A	rg	Tyr	His	Leu	Met	Tyr	Lys	Pro	Pro	Pro	Thi	Met	Gli	ı Ile	e Glr	ı Ala	
102						405					410)				415	j	
103	A	rg	Leu	Leu	Gln	Asn	Pro	Lys	a Asp	Ala	Glu	ı Glı	ı Glr	va]	Lys	Lei	Lys	
104					420					425					430)		
105	M	et	Asp	Leu	Phe	Tyr	Arg	J Asr	ı Sei	Ala	Asp	Let	ı Glu	Glr	ı Lei	туг	Gly	
106				435					44()				445	5			
107	S	er	Ala	Ile	Thr	Leu	Asn	Gly	/ Asp	Gln	Asp	Pro	Tyr	Thi	. Val	Phe	Glu	
108			450					455	5				460)				
109	T	yr	Ile	Glu	Ser	Gly	Ile	: Ile	e Ası	n Pro	Leu	Pro	Lys	Lys	s Ile	Pro)	
110	4	65					470)				475	5					
112 <2	210> S	EQ	ID :	NO:	3													
113 <2	211> L	ENG	TH:	285								,						
114 <2	212> T	YPE	E: D	NA														
115 <2	213> C	RGA	NIS	M: h	omo	sapi	ens											
116 <4	100> S	EQU	JENC	E: 3														
117	a	tgg	gage	ggc 1	tgac	tctg	ag a	agaa	ittga	at cc	agto	acto	g ggg	aaaç	ggta	ccac	ctcatg	60
110																		
118	t	aca	agc	cac o	ctcc	cacc	at g	gaga	itcca	ag .gc	tcgc	ctcc	: tgc	agaa	accc	aaag	gatgct	
118 119			_								_		_	_		_	ıgatgct ıgagcag	120
	9	aag	gagc.	agg 1	tcaa	gctg	aa a	atgo	gacct	gtt	ctac	agga	act	cago	etga	ctte		120 180
119	g	aag tgt	gagc :atg	agg t ggt (tcaa cggc	gctg catc	aa a ac c	atgo	gacct latgo	gtt	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180
119 120	g t a	aag tgt	jagc :atg jaga	agg t ggt d gtg g	tcaa cggc ggat	gctg catc	aa a ac c	atgo	gacct latgo	g tt gg ga	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180 240
119 120 121	9 t a 210> S	aag tgt tcg EQ	gage atg gaga ID	agg t ggt d gtg g NO: 4	tcaa cggc ggat	gctg catc	aa a ac c	atgo	gacct latgo	g tt gg ga	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180 240
119 120 121 123 <2	9 t a 210> S 211> I	aag tgt tcg EQ ENG	gage atg gaga ID 1	agg t ggt d gtg g NO: 4	tcaa cggc ggat	gctg catc	aa a ac c	atgo	gacct latgo	g tt gg ga	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2	9 t 210> S 211> L 212> T 213> O	tgt tcg EQ ENG YPE RGA	jago atg jaga ID ITH: E: PI	agg 1 ggt 0 gtg 9 NO: 4 94 RT M: ho	tcaa egge ggat 4	gctg catc catt	aa a ac c aa t	atgo	gacct latgo	g tt gg ga	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180 240
119 120 121 123 <2 124 <2 125 <2	9 t 210> S 211> L 212> T 213> O	tgt tcg EQ ENG YPE RGA	jago atg jaga ID ITH: E: PI	agg 1 ggt 0 gtg 9 NO: 4 94 RT M: ho	tcaa egge ggat 4	gctg catc catt	aa a ac c aa t	atgo	gacct latgo	g tt gg ga	ctac .ccag	agga gaco	a act	cago acao	etga	ctte	gagcag	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2	9 t 210> S 211> L 212> T 213> C 400> S	aag tgt tcg EQ ENG YPE RGA	Jago Jaga Jaga JETH: JE: P: JENC	agg t ggt q gtg g NO: 4 94 RT M: ho	tcaa egge ggat 4 omo	gctg catc catt sapi	aa a ac c aa t	iatgg	gacet latgo	g tt gg ga cc aa	ctac .ccag .gaaa	agga gacc	a act	.cago .acao .ga	etga eagt	ctto ctto	gagcag	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4	9 t 210> S 211> L 212> T 213> C 400> S	aag tgt tcg EQ ENG YPE RGA	Jago Jaga Jaga JETH: JE: P: JENC	agg t ggt q gtg g NO: 4 94 RT M: ho	tcaa egge ggat 4 omo	gctg catc catt sapi	aa a ac c aa t	iatgg	gacet latgo	g tt gg ga cc aa	ctac .ccag .gaaa	agga gacc	a act	.cago .acao .ga	etga eagt	ctto	gagcag gaatac	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128	9 t 210> S 211> L 212> T 213> C 400> S	tgt tgt EQ ENG YPE RGA EQU	Jago Jaga Jaga JETH: STH: PI MISI JENC Glu	agg toggt of general g	tcaa cggc ggat 4 omo Leu	gctg catc catt sapi Thr	aa a ac c aa t ens Leu	iatgo ctca cccc	gacct natgo etgeo	g tt gg ga cc aa	ctac .ccag .gaaa .gaaa .gaaa	agga gacc atco	a act	.cago .acao .ga	etga eagt	ctto ctto Glu 15	gagcag gaatac	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129	9 t a a 210 > S 211 > L 212 > T 213 > C 400 > S M	aag tgt tcg EQ YPE RGA EQU et 1	Jage Jage Jaga JETH: STH: STH: GIU His	agg (ggt oggt oggt oggt oggt oggt oggt og	tcaa egge ggat 4 omo Leu Met 20	gctg catc catt sapi Thr 5 Tyr	aa a ac c aa t ens Leu Lys	atgg ectea ecce	gacct aatgg ttgco	g tt gg ga cc aa g Ile p Pro 25	ctac ccag gaaa : Asp 10	agga gacci atco Pro	a act c cat c cct v Cot	cago acao ga Thi	etga eagt Gly e Glr 30	ctto ctto Glu 15 n Ala	ggagcag ggaatac a Arg	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130	9 t a a 210 > S 211 > L 212 > T 213 > C 400 > S M	aag tgt tcg EQ YPE RGA EQU et 1	Jage Jage Jaga JETH: STH: STH: GIU His	agg (ggt oggt oggt oggt oggt oggt oggt og	tcaa egge ggat 4 omo Leu Met 20	gctg catc catt sapi Thr 5 Tyr	aa a ac c aa t ens Leu Lys	atgg ectea ecce	gacct aatgg ttgco	g tt gg ga cc aa g Ile p Pro 25	ctac ccag gaaa : Asp 10	agga gacci atco Pro	a act c cat c cct v Cot	cago acao ga Thi	etga eagt Gly e Glr 30	ctto ctto Glu 15 n Ala	ggagcag ggaatac gaatac	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131	9 t a 210 > S 211 > L 212 > T 213 > C 400 > S M	aag tgt tcg EQ ENGA EQU et 1 yr	Jago Jago Jaga JETH: JETH: JENC Glu His	agg f ggt c gtg g NO: 4 94 RT M: ho E: 4 Arg Leu Gln 35	tcaa egge ggat 4 omo Leu Met 20 Asn	gctg catc catt sapi Thr 5 Tyr	aa a ac c aa t ens Leu Lys	atggetea ectea ecce	gacct latge ttgco y Arg Pro Ala 40	g Ite g Ile Pro 25	ctac ccag gaaa Asp 10 Thr	agga gacc atco Pro Met	o Val	Cago acac ga Thi Ile	etga eagt Gly e Glr 30	Ctto Ctto Glu 15 n Ala	ggagcag gaatac Arg Arg	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132	9 t a 210 > S 211 > L 212 > T 213 > C 400 > S M	aag tgt tcg EQ ENG YPE RGA EQU et 1 yr eu	Jage Jage Jage JETH: JETH: JENC Glu His Leu	agg f ggt c gtg g NO: 4 94 RT M: ho E: 4 Arg Leu Gln 35	tcaa egge ggat 4 omo Leu Met 20 Asn	gctg catc catt sapi Thr 5 Tyr	aa a ac c aa t ens Leu Lys	atggetea ectea ecce	gacct latge ttgco y Arg Pro Ala 40	g Ite g Ile Pro 25	ctac ccag gaaa Asp 10 Thr	agga gacc atco Pro Met	o Val	Cago acac ga Thi Ile	etga eagt Gly e Glr 30	Ctto Ctto Glu 15 n Ala	ggagcag ggaatac a Arg	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132 133	9 t a 210> S 211> L 212> T 213> C 400> S M	aag tgt tcg EQ ENG YPE RGA EQU et 1 yr eu sp	Jago Jaga Jaga ID JETH: E: P ANIS JENC Glu His Leu Leu	agg f ggt c gtg g NO: ' 94 RT M: hc E: 4 Arg Leu Gln 35 Phe	tcaa cggc ggat 4 omo Leu Met 20 Asn	gctg catc catt sapi Thr 5 Tyr Pro	aa aa aa aa aa aa aa aa t ens Leu Lys Lys	Arg Arg Asp Ser Ser	gacct atgg ttgco Pro Ala 40	g It gg ga cc aa g Ile o Pro 25 a Glu	Asp 10 Thr	eaggaconatico percenta Met	value Glue Glue Glue Glue Glue Glue Glue G	Thi Lys 45	e Gly e Glr 30 s Leu	Glu Glu 15 n Ala n Lys	gagcag gaatac Arg Arg Met	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132 133 134	9 t a 210> S 211> L 212> T 213> C 400> S M	aag tgt tcg EQ ENG YPE RGA EQU et 1 yr eu sp	Jago Jaga Jaga ID JETH: E: P ANIS JENC Glu His Leu Leu	agg f ggt c gtg g NO: ' 94 RT M: hc E: 4 Arg Leu Gln 35 Phe	tcaa cggc ggat 4 omo Leu Met 20 Asn	gctg catc catt sapi Thr 5 Tyr Pro	aa aa aa aa aa aa aa aa t ens Leu Lys Lys	Arg Arg Asp Ser Ser	gacct atgg ttgco Pro Ala 40	g It gg ga cc aa g Ile o Pro 25 a Glu	Asp 10 Thr	aggaconateo	value Glue Glue Glue Glue Glue Glue Glue G	Thi Lys 45	e Gly e Glr 30 s Leu	Glu Glu 15 n Ala n Lys	gagcag gaatac Arg Arg Met Ser	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132 133 134 135	9 t a 210> S 211> L 212> T 213> C 400> S M	aag tteg EQ ENG YPE EQU et 1 yr eu sp la 5	gagc gaga ID gaga ITH: E: P INNIS Glu His Leu Leu 50 Ile	agg figgt of ggt	tcaa cggc ggat 4 omo Leu Met 20 Asn Tyr	gctg catc catt sapi Thr 5 Tyr Pro Arg	aa aa taa caa taa taa taa taa taa taa ta	Arc Arc Asp Asp Asp Asp	gacct atgg ttgco Pro Ala 40 Ala	g It gg ga cc aa g Ile o Pro 25 a Glu a Asp	Asp 10 Thr Glu	eaggaconateo	Value Glue Glue Glue Glue Glue Glue Glue G	Thi Ile Lys 45 Leu	etga cagt Gly e Glr 30 s Leu r Tyr	Glu Glu Glu Glu Gly Gly	gagcag gaatac Arg Arg Met	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132 133 134 135 136 137 138	9 t a 210> S 211> L 212> T 213> C 400> S M	aag tteg EQ ENG YPE EQU et 1 yr eu sp la 5	gagc gaga ID gaga ITH: E: P INNIS Glu His Leu Leu 50 Ile	agg figgt of ggt	tcaa cggc ggat 4 omo Leu Met 20 Asn Tyr	gctgcatccatt sapi Thr 5 Tyr Pro Arg Asn	aa aa taa caa taa taa taa taa taa taa ta	Arc Arc Asp Asp Asp Asp	gacct atgg ttgco Pro Ala 40 Ala	g It gg ga cc aa g Ile o Pro 25 a Glu	Asp 10 Thr Glu	eaggaconateo	Value Glue Glue Glue Glue Glue Glue Glue G	Thi Ile Lys 45 Leu	etga cagt Gly e Glr 30 s Leu r Tyr	Glu Glu Glu Glu Gly Gly	gagcag gaatac Arg Arg Met Ser	120 180 240
119 120 121 123 <2 124 <2 125 <2 126 <2 127 <4 128 129 130 131 132 133 134 135 136 137	9 t a 210> S 211> L 212> T 213> C 400> S M	aag tteg EQ ENG YPE EQU et 1 yr eu sp la 5	gagc gaga ID gaga ITH: E: P INNIS Glu His Leu Leu 50 Ile	agg figgt of ggt	tcaa cggc ggat 4 omo Leu Met 20 Asn Tyr	gctg catc catt sapi Thr 5 Tyr Pro Arg	aa aa taa caa taa taa taa taa taa taa ta	Arc Arc Asp Asp Asp Asp	gacct atgg ttgco Pro Ala 40 Ala	g It gg ga cc aa g Ile o Pro 25 a Glu a Asp	Asp 10 Thr Glu	eaggaconateo	Value Glue Glue Glue Glue Glue Glue Glue G	Thi Ile Lys 45 Leu	etga cagt Gly e Glr 30 s Leu r Tyr	Glu Glu Glu Glu Gly Gly	gagcag gaatac Arg Arg Met Ser	120 180 240

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/31/2004 PATENT APPLICATION: US/10/798,773 TIME: 13:01:03

Input Set : N:\Crf3\RULE60\10798773.raw
Output Set: N:\CRF4\08312004\J798773.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY

DATE: 08/31/2004

PATENT APPLICATION: US/10/798,773

TIME: 13:01:03